Listing of Claims:

1. (original) A microchemical system that convergently irradiates exciting light and detecting light onto a sample using a converging lens, and measures the detecting light passing through a thermal lens generated by the convergent irradiation of the exciting light, characterized by comprising an optical fiber for guiding the exciting light and the detecting light to the converging lens.

2. (original) A microchemical system as claimed in claim 1, wherein the converging lens is secured to one of both ends of the optical fiber that is closer to the sample.

3. (original) A microchemical system as claimed in claim 2, wherein the optical fiber comprises a single optical fiber.

4. (original) A microchemical system as claimed in claim 2 or 3, wherein the exciting light and the detecting light have respective different frequencies, the converging lens has chromatic aberration, and the exciting light and the detecting light passing through the converging lens have respective different focal positions.

5.   (amended)   A microchemical system as claimed in any one of claims 1 to ~~4~~ 3, wherein the converging lens ~~is~~ comprises a gradient index lens.

6.   (amended) A microchemical system as claimed in claim 5, wherein the gradient index lens ~~is~~ comprises a rod lens.

7.   (amended) A microchemical system as claimed in any one of claims 1 to ~~6~~ 3, wherein the optical fiber exhibits a single mode in the frequencies of the exciting light and the detecting light.

8.   (amended) A microchemical system as claimed in ~~any of claims 2 to 7~~ claim 2 or 3, further comprising moving means for moving the optical fiber having the converging lens secured to the one end thereof.

9.   (amended) A microchemical system as claimed in ~~any of claims 2 to 7~~ claim 2 or 3, further comprising at least two pairs of the optical fiber and the converging lens secured to the one end of the optical fiber.

10. **(new)** A microchemical system as claimed in claim 4, wherein the converging lens comprises a gradient index lens.